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GENESEE FARMER.

SATURDAY, DECEMBER 30 1837.

☞ This number completes the seventh year of our labors; and, in tendering our thanks for past favors from the public, we would also assure them that our preparations are such as will enable us, we trust, to make the next volume of the Genesee Farmer at least equal if not superior to any of its predecessors.

The Index of this volume will be sent to subscribers as soon as we can get it completed and printed.

LIME.

There is no fact connected with agriculture more incontrovertibly proved, than that the presence of lime in the soil is indispensable to the production of wheat. Dr. Mitchell, one of the ablest observers and writers this country has yet seen, appears to have been one of the first to call the attention of farmers to this fact, and attempt an explanation of the reasons which led to such a result. In the mean time, those self taught philosophers, the Germans of Pennsylvania, had by experience discovered its value and adopted its use, in preparing their soils for the production of this staple crop, and were thus enabled to keep up the fertility of their farms and their productiveness for wheat; while the Dutch and English farmers in the once rich vallies of New York, and on the banks of the Mohawk and Schoharie, found their farms growing worthless for wheat, and have long been compelled nearly to abandon its cultivation. In New England the result was the same, only the exhaustion was sooner performed, as the stock of calcareous matter in the earth being much smaller, and the effect of the alkaline substances produced in clearing the land on the animal matter existing in the soil, was more quickly dissipated. Art is beginning to restore to the earth the lime which in some places was deficient by nature, or had been exhausted by injudicious farming, and fertility and the capability of raising wheat is returning to those sections, where for years the power has been unknown.

The method in which lime performs the effects which it is undeniable may be atiributed to it, does not yet appear to be fully understood. Were not its efficiency, as in the case of gypsum, owing to some chemical rather than mechanical cause, it would hardly seem possible that so small a quantity as is sometimes used, would produce so immediate a result, or where larger quantities are applied, that the benefits should be so permanent. It is most probable however that its action is principally confined to preparing the animal matter existing in the soil, or furnished it by manures, for conversion into gluten, a substance which exists more abundantly in wheat than any other vegetable, and which appears to have some relation to the gelatine of the animal kingdom.

Boullion La Grange says that, "gelatine oxyganized becomes insoluble, and vegetable extract we know becomes so from the same cause; now lime has the property of attracting oxygen, and, consequently of restoring the property of solubility to those substances that have been deprived of it from a combination with oxygen. Hence the use of lime on peat or muck lands, and on all soils containing an excess of vegetable insoluble matter." 'When lime is applied upon land in which any quantity of animal matter is present, it occasions the evolution of a quantity of ammonia which may perhaps be imbibed by the leaves of plants, and afterwards undergo some change so as to form gluten. It is upon this circumstance that the operation of lime in the preparation for a wheat crop depends; and its ascertained efficacy in fertilizing peat, and in bringing into a state of cultivation all lands abounding in dry roots, hard fibres, or inert vegetable matter.' (Loudon.)

According to Chaptal, 'lime forms insoluble composts with almost all animal and vegetable substances that are soft, and thus destroys their fermentative qualities. Such compounds however, exposed to the continued action of the air, alter in course of time, the lime becomes carbonate; the animal or vegetable matter decomposes by degrees, and furnishes new products as vegetable nourishment." In this view lime presents two great advantages for the nutrition of plants; the first, that of disposing insoluble bodies to form soluble compounds; the second that of prolonging the action and nutritive qualities of substances beyond the term during which they would be retained, if these substances were not made to enter into a combination with lime. Thus a striking example is furnished by the nutritive qualities of blood as it exists in the compound of lime and blood, obtained from sugar refineries and known as sugar baker's scums. Blood alone applied to the roots of plants, will destroy them with few or no exceptions; combined with lime, it forms one of the most efficient of manures, as its qualities are moderated, prolonged and given out by degrees.

Lime has another effect, a mechanical one, independent of its chemical ones as stated above. Where wheat is sown on clay land, the mechanical effect of lime in opening the soil and rendering it more permeable, especially if applied in the form of silecious marl, cannot be too highly appreciated. Farmers are well aware that on stiff clay lands, much of the grain that is sown does not vegetate. The reason of this is that air, or in other words oxygen, is essential to germination, and clay if a little moist, forms an impenetrable sheathing to the grain. The presence of lime prevents this; even the small quantity retained by the kernal when merely rolled in lime after being steeped in brine, will produce this effect more or less, and thus aid the growth of wheat both chemically and mechanically. It is well understood, that in those sections of our country where the soil is exhausted of its calcareous matter, by the application of stable manure, a most vigorous growth of straw can be obtained, but the berry will be of the most inferior and worthless kind; resembling in quality those grains, of which gluten forms only a minor and subordinate portion. In such cases it is evident the chemical action of lime is wanting to furnish the ingredients that in the vessels of the plants are converted into this peculiar and indispensable substance. The vast amount of calcareous matter in the wheat soils of western New York, have hitherto prevented much attention to the subject of lime as a renovator of the soil, and rendered its application generally unnecessary; but we think the time in many places and on many farms has arrived, when more attention should be paid to the subject, and series of experiments instituted to ascertain the effect of lime on the soil, and the kind, and quantity most suitable and beneficial per acre. Perhaps no constituent of the soil is of more importance to the farmer than lime, and the understanding of its nature and uses, should, if possible, be commensurate with its utility and value.

Refuse Wool.

Of all the animal matters that chemical analysis and experiment have shown to be useful as manures, few are found to equal in efficacy and value refuse wool; such as is found in large quantities in woolen factories, carding machines, where numbers of sheep are washed and sheared, &c. and which is usually thrown away as worthless. Horn and bone are well known as first rate manuring substances, containing as they do large quantities of decomposable animal matter, principally gelatine; of these two horn is the most valuable, as containing less insoluble or earthy substance, and wool differs but very little in its composition and in its active qualities from scraped bone.

Loudon says, "Hair, wool, and feathers, are all analagous in compensation, and principally consist of a substance similar to albumen united to gelatine. This is shown by the ingenious researches of Hatchett. The theory of their operation as manures, is similar to that of bone and horn shavings." The effect of wool or hair as a manure is very durable, since water can only dissolve them by means of fermentation, which takes place slowly, and after a long time.

M. Chaptal observes, "one of the most surprising instances of fertile vegetation I have ever seen, is that of a field in the neighborhood of Montpelier, belonging to a manufacturer of woolen blankets. The owner of this land causes it to be dressed every year with the sweepings of his workshops; and the harvests of corn and fodder it produces are astonishing.

It is well known that the hairs of wool transpire a fluid which hardens upon their surface, but which possesses the property of being easily soluble in water. This substance has received the name of animal sweat; the water in which wool has been washed contains so much of it, as to make it very valuable as a manure. * * According to the analysis of M. Vanquelin, this animal sweat is a soapy substance, consisting of a base of potash, with an excess of oily matter, and containing beside some acetate of potash, a little of the carbonate and muriate of the same base, and a scented animal matter."

Old woolen rags, old shoes, scraps of leather, and indeed any substance the base of which is gelatine or albumen, is useful as manure, and many farmers have experienced the benefits of these articles in burying them around the roots of their fruit trees. The Genoese, according to Chaptal, entertain the same value of woolen rags; carefully gathering all they are able of the shreds and rags of woolen fabrics, to place at the foot of their numerous olive trees.

Two or three instances are on record in the farming journals of this country, where refuse wool has been used with success. In one case Mr. Burrows of Watervleit spread several wagon loads on his land with the best effect, and in order to test its value as compared with hog dung, spread a bushel of the flocks or refuse of the factory, on a rod square of gravelly paving stone soil, and on the same quantity of land double the amount of hog manure was spread. On neither piece was any other manure used; and both were planted with corn. They were treated as nearly alike as possible, and at harvesting seven square rods of the wool manured land yielded at the rate of 99 bushels of shelled corn to the acre, while the same number manured from the hogpen did not reach 50 bushels to the acre.

Mr. Hubbard of Middletown, Conn. informed the editor of the Cultivator, that he cut fifteen tons of hay from three acres of land, at one cropping, which had been brought to this state of fertility, from a low condition, by the sweepings of his woolen factory. Bets having been made by his neighbors on the amount of the crop, the hay was accurately weighed.

The fact that wool is so valuable in ameliorating the soil, should prevent the waste of this excellent manure, that frequently takes place in woolen manufactories, carding machines, &c. where it is nothing uncommon to see the banks of streams lined for rods by the flocks which have been cast into it, to rid the proprietors of a supposed incumbrance. Every such manufacturer has in his refuse wool the means of enriching a small farm to any desirable extent, and if he has no use for the flocks himself, they might, if their value was understood, be sold for twice the expence of gathering together and preserving them. We hope woolen manufacturers will bear this in mind, and either institute experiments themselves, or enable others to do it, which shall establish the rate of value to be put on refuse wool, and introduce into use an article,

which though somewhat limited in its extent, would be of great benefit wherever it could be procured.

Distribution of Plants.

Considerable surprise has been at times manifested at the sudden appearance of plants different from any in the vicinity, and in situations where man was not likely to have had any influence in their dissemination. Since the migration of birds of passage has been better understood, much of the difficulty that invested the subject has been done away, and it has been shown that many plants, and some that are of the most valuable varieties, have in this way found a place in districts where they might never otherwise have had an existence. Two or three years since a farmer killed a wild goose near the shores of the Champlain, on its passage to the north, and in its crop was some wheat, which was carefully saved and sown. It proved to be a new variety of excellent quality, and has been widely disseminated. Observation shows it to resemble a kind grown in Cuba on the more elevated sections of the island, and it is quite probable that from thence, or a similar situation, it was derived. The following notice lately appeared in the Chicago Journal: "We have received a specimen of wheat, raised this season on Rock River, Wisconsin territory. The seed was taken by our informant from the crop of a bird of passage, and this is the second season he has cultivated it. Four or five seeds were all he had to put into the ground the first season, and this year he has a garden spot full of it. It has three pronged stems, and is a beautiful and superior production." The fact mentioned of the spikes or ears growing in clusters on the stem, proves it to be the Egyptian wheat, or a similar variety; this kind of wheat produces from two to six ears on the same stem. We should have been gratified had the kind of bird of passage been stated, as it might have furnished a clue to the place where it was obtained, and an insight into the habits of the bird, by disclosing its winter's place of residence. In noticing facts of this kind that have a bearing on natural history as well as agriculture, editors might render an essential service to the community, by collecting as many of the circumstances connected with such accidental discoveries, as can be well authenticated. It will be recollected by most farmers, that the white flint wheat, the most valuable kind for flour yet known in this country, and one of the hardiest of our varieties, was at first called swamp wheat, from its place of discovery, which was in a swamp near Wood Creek in Oneida county, and from its imagined adaptation to lands lying low, or inclining to be wet. Such was the name under which we purchased our first wheat of this kind, nearly twenty years since, but which has been gradually superseded by the more generally known and appropriate one of white flint. That this wheat found its way to the place where it was discovered, in some way like the one just mentioned, seems scarcely to admit of a doubt; and if, as has been asserted, it resembles the wheat grown on the table lands of Venezuela and Colombia, it furnishes a striking proof not only of the range of migration, but the rapidity with which this removal must be performed, since it is evident that a long retention in the crop of a bird would deprive grain of its vegetating powers. We think it not improbable that many valuable grains, and perhaps fruits, might thus be introduced or distributed, did those whose opportunities for observing birds of passage on their spring or fall migrations, examine such specimens as fall under their notice, with a view to ascertain their food, and consequently the contents of the crop.

Quantity of Seed Wheat per Acre.

This subject, which is of much practical interest to the farmer, is undergoing a full discussion in the foreign journals, in consequence of the advertisement of a new variety of wheat produced by crossing and careful culture, of which it is said that it tillers, or throws out such an abundance of stalks from the root, that half a bushel of seed is an abundant quantity of seed for an acre. The quantity hitherto used in England has been nearly as various as in this, though the amount has never been quite so small as is sometimes, we think very injudiciously, practiced by our farmers. Two and two and a half are the smallest quantities used per acre in that country, and Mr. Coke of Holkham, who usually sows from four to five hundred acres of wheat, never uses less than three and a half or four bushels per acre. Mr. Coke's wheat is usually drilled in, and of course is more equally distributed than if sown broad cast; and Mr. Coke thinks he saves seed enough to amply repay the extra labor of drilling. Unless under a different system of farming than any that can be adopted in this country—for instance, Mr. Coke employs during the season, from 50 to 100 women in weeding and dressing his fields—we are confident the amount of seed used by Mr. Coke would be too large, and unless planted by dibbling, and subjected to the hoe culture, two pecks of wheat could never seed an acre sufficiently.

Sowing Winter Wheat in the Spring.

Judge M'Call was undoubtedly correct in his supposition, that to have winter wheat be converted into spring wheat, it was necessary to have it sprouted before freezing; or in other words the grain must germinate to succeed as spring wheat. Two of our farming friends made an experiment on a small scale last winter, to test the possibility of such conversion. One succeeded admirably and his wheat all grew add was of excellent quality; the other, by not allowing, as he supposed, germination to progress sufficiently, found that about half the wheat he sowed did not ear at all, but would be obliged to be kept over the year to produce wheat. We intend if possible to procure detailed accounts of the processes adopted by these farmers, for the benefit of such as wish to test the feasibility of raising wheat in this way. For ourselves we think the plan perfectly practicable and safe, and that it may be adopted on many farms with complete success If wheat of the quality of our white winter wheats can be grown by such preparation, it is evident the object will warrant some care and expence; and should the method proposed by Judge M'Call fail—which we are convinced it will not if properly conducted—his skill and science will hardly fail of finding some way to overcome all obstacles to a successful result.

Experiments in the Culture of Silk.

The following letter from Mr. E. Newcomb of Polsley's Mills, (Va.) to the editor of the Silk Culturist, details the manner and results of some experiments in silk making, which will be found useful to new beginners:

Dear Sir—Having been an attentive reader of the Silk Culturist, as well as many other periodicals on the subject of culture and manufacture of silk, and feeling a deep interest in their success in the United States, and having read of various experiments in feeding worms, and of various fixtures for the worms to wind their cocoons on, I have been induced to try some experiments myself. Although a beginner in the business, it may possibly be some satisfaction to some of your readers to hear the results of my experiments. About the 20th of May last, I hatched about 200 silk worms and fed them about five weeks, when they commenced spinning and made good cocoons.

On the 4th, 5th, and 6th of June, the second crop hatched and fed 30 days, and were healthy, and made 4,000 good cocoons. On the 13th, 14th, 15th, and 16th of June, the third crop hatched, and fed well, and were healthy until about the 26th day after hatching, at which time many of them were attacked with a disease called the yellows, which carried off half of them; the remainder spun their cocoons, 3,000 in number, but they were small and light. The above worms were from last year's eggs. The fourth crop hatched on the 29th July, and fed about 26 days, and were very healthy and made large cocoons. The fifth crop hatched on the 7th, 9th, 11th and 13th of August, and spun in 26 days after hatching, and were healthy and made good large cocoons. Of the fourth and fifth crops, which made 42 knots of silk on Dales' reel, four threads of which made good sewing silk. The fourth and fifth crops were from eggs of this year's produce.

It appears that eggs will not hatch *regularly* the *same season* which they are *laid*. Having read various opinions on that subject, I thought I would try some experiments, and accordingly obtained a few eggs, about the 12th of August, in 1836, and exposed them to the common atmosphere, and not one of them hatched that season.

Although some of the same stock from which I got them did hatch, (to the number of about 200,) about six weeks or two months before. About the 20th of May, I exposed the few eggs last mentioned, together with about 4,000 of the same stock, and in about a week after, they all hatched out, that is, they hatched on the 4th, 5th, and 6th June.

I left about 6 or 8,000 eggs, deposited this season, on the hurdles, in hopes that they would hatch, as they were sent for the *two crop*, or *white worm*, and 300 of them hatched. About the same time I examined those that were in the cellar, and found that 2 or 300 of them had hatched also. I then exposed 6 or 7,000 of those in the cellar to the common atmosphere, but not another worm of them hatched this season.

The plan I have adopted for feeding frames is similar to that of Mr. Whitmarsh of Northamton, Mass. with this difference, that instead of having all the hurdles of one size, I have them arranged in the following manner: My hurdle frame is about three feet wide, divided as follows: the first hurdle, for the worms when first hatched, is a thin board thirteen inches wide; the second hurdle is a frame covered with millinet, which is two feet wide, with a paper slide underneath. The third hurdle is a frame covered with net work, four feet wide; and the fourth hurdle is six feet in front covered with net work, and a slide underneath as above. This plan is designed for successive crops, and answers a good purpose, with one exception, which is, that, when the worms are spinning, some of the worms are inclined to spin between the net work and paper slides, and by drawing the slides in order to clean off the litter, you will disturb the worms in their labor, and those so disturbed are lost. But in order to obviate that difficulty, I dropped the slide one and a half inches lower, so that they could not reach from the net work to the paper slides below. I have tried Mr. Whatmarsh's plan for the worms to spin on, and I have substituted small lath for his net work, and the worms appear better pleased with the lath than the net work. I have tried the plan of seven eighth inch holes in one and three-fourth inch plank. The holes answered a good purpose, but are too expensive unless made by a machine for that purpose.

I have invented a plan, which pleases me better than any that I have seen, or read of. It is to take a thin plank, five-eighths of an inch thick, and seven or eight inches wide, with legs about one and a half inches long at the bottom edge of the plank, and form shelves by running grooves in each side of the plank, about seven-eighths of an inch apart, and take a thin board, from one-eighth to one-fourth of an inch thick, and slit off pieces wide enough to fill the groves, and to project about seven-eighths of an inch, so as to form small shelves. This gives them just room to form their cocoons. The worms appear better pleased with this plan than any other, I have tried; and no litter can fall from one worm to another, and of course the cocoons are kept entirely free from any litter whatever.

I have made a silk reel after Dales' plan, and have succeeded in reeling about three lbs. of silk, and have manufactured about 500 skeins of sewing silk, a part of which is said to be as good as most of the imported. The above silk was manufactured on the common wheel, but I intend to get a small spinning machine, before I manufacture much more. I do not expect to make much silk next season, but the following year I am in hopes I shall be able to make from 40 to 50 lbs. of silk, if I have good luck with my trees and cuttings, as I have Italian and Chinese trees and cuttings, sufficient to stock about three acres of land, which I have lately purchased for that purpose. I shall have about 3,000 Italian trees two years old for sale this fall, or next spring. I would sell them this fall if called for. I have about 160,000 silk worm eggs for sale also, both of which I will sell as reasonably as they can be had at any regular market.

From the Maine Farmer.

Treatment of Wounds on Horses.

Mr. Holmes—I wrote a short communication, last spring, requesting information on the treatment of wounds on horses, &c., stating that I had a valuable beast badly wounded. I received no intelligence through the Farmer, except your note at the bottom of my letter; but being successful, I will state my method of treatment, which you are at liberty to publish for the information of your readers.

When the beast was first hurt, I washed the wound a few days in strong soap-suds, which served only to irritate and inflame it: finding this injurious, I concluded to try something more mild. I then took dry white lead and pulverized it, and put on as much as would adhere to the raw flesh by means of the oil. This operation I performed twice a day for some time, and afterwards but once a day. This simple application has perfectly healed the worst wound I ever saw on a horse—for

when she got hurt I was advised to kill her, as the wound was thought incurable.

The oil will keep off the flies, and the white lead forms a crust or covering that excludes the air and prevents irritation. A. B.

Augusta, Nov. 27, 1837.

From the New England Farmer.

MANURE.

We published a piece the last week headed "Manure," by "A Common Farmer," which we took from the N. H. Patriot, not because we believed the writer correct in his notions, but that the truth might be elicited thereby. We had prepared some remarks, pointing out the errors of the *Common Farmer*, as we supposed, when we received the following able communication, which caused our own remarks to be laid under the table, to make room for those of our correspondent, which are much more to the point.

—

Messrs. Editors—In your last paper, under this caption, you published some remarks from the N. H. Patriot, by a *Common Farmer*, in which he expressed his anxiety in respect to the manner of using manure, &c. The importance of making, saving, and right application of manure, has long engaged the attention of not only *common*, but uncommonly good farmers, and much has been said and published on the subject. From long observation and experience, I am convinced that few at this enlightened day, will adopt his theoryless practice. His bold assertions may elicit the truth, and he may thereby obtain what he is seeking after, or stand corrected of his error.

I will not quarrel with him for spreading his manure on his grass ground in the fall, provided they are properly composted; but should not advise spreading strong manures, or manures unmixed with soil or mud, nor of carting and spreading in the fall, to plough in, in the spring. This is a wasteful practice.

He professes not to be "so fearful of losing the strength of his manure by evaporation as some farmers are, otherwise he might think a considerable part was made in vain." With the same propriety he might think his house made in vain, because it is composed of combustible materials, and may take fire and burn down! It is for his interest, it is his duty, as a prudent man, as a good citizen, to guard against either calamity. He says, "if any manure was made in vain, I should say it is that which is ploughed under something like a foot deep in the full strength."

I am not much acquainted with the manner or depth of ploughing in New Hampshire; but spread on your strongest manure, and put in your deepest furrows, and a succession of crops shall average one-third more than your *shallow* system.

I cannot discover the nub of his hasty-pudding story, or its application to ploughing in manure. The taste of people may vary, and some might prefer his pudding and salt to his salt water pudding. But dame nature has no such freaks; and reason and common sense teaches that manure properly applied, is buried in the soil when intended to benefit vegetation.

He further says, "it is obvious that manure in its natural state in full strength, produces nothing of consequence, that when buried in the earth, ten or twelve inches, it will remain in nearly the same state, unless washed, leached or drained; that it drains downwards and not upwards; that should the strength all come out of it, the roots of corn or vegetables would receive but little nourishment from it, it being deeper than the warmth of the sun will reach suitably to render it fertile." It is a fact well known to practical and scientific farmers, that a grain of wheat, when planted in a mellow soil, will strike its roots three feet downward; the roots of oats eighteen inches; the beet, parsnep and carrots fourteen inches; the potatoe will put out its leaders eighteen inches, and clover and the fine grasses much farther.

It is a fact equally well known, that manure in undergoing a violent fermentation, unmixed with soil or other substances to confine the gases, will lose one half its weight. Under the furrow this fermentation is gradual, and as the season advances, as the heat increases, so increases the process of fermentation. The gases rise and mingle with the soil, and become the food for plants, when most wanted to ripen the seed or mature the vegetables. I wish my friend, the Common Farmer, to bear in mind that in the process of fermentation, the gases *always* ascend; that manure cannot be buried too deep by the plough; that the sun and atmosphere have influence upon the soil, to as great a depth as it freezes in winter, or thaws in the spring; that this influence is upward and not downward, and that manure is seldom buried by the plough, or washed by the rains, beyond that influence; that his theory is altogether bad; that if he is a young man, and open to conviction, he may yet learn; and I should advise him to take the N. E. Farmer. C.

Mattakees, Plymouth co. Dec. 1837.

From the Farmer and Gardener.

Sugar Beet Seed.

We comply with the utmost cheerfulness with the request of the public spirited and truly patriotic gentleman, whose name is attached to the subjoined advertisement, and commend not only its perusal to our agricultural readers, but hope that they will avail themselves of his patriotic effort to disseminate the genuine seed of this excellent root throughout the country. It is thrice honorable to this good man, that in the evening of his days, surrounded by every thing, as he is, that can lend a charm to life, he is devoting himself with zealousness to the procurement and introduction of the most valuable European seeds into the land of his adoption without the slightest prospect of profit, asking nothing for them but prime cost and charges. We were gratified, on reading the advertisement, to find it a very sound condensed essay on the virtues of the beet, and have no doubt it will be read with interest and profit. In a conversation some days since with one, whom we esteem as one of the best farmers in the country, and who has raised the present year both the *sugar beet* and *mangel wurtzel*, he assured us, that he preferred the former to the latter, inasmuch as he believed *it* contained *much more nutritious matter*, would bear its leaves being stripped equally as well, was equally productive, and was eaten as readily by his stock; and from experience we can say, that as a *table beet* it is far preferable to the best *blood red*, possessing as it does infinitely more sweetness, and being entirely clear of that *earthy taste*, which renders the latter root disagreeable to many palates.

SUGAR BEET SEED.

For sale, 250 lbs., price seventy-five cents per lb., and in bags of six pounds twelve ounces, or thirteen pounds eight ounces; the quantities are chosen to accommodate payments and remittances by mail, the smallest quantity amounting to five, and the largest to ten dollars.

The vegetative freshness of this seed has been ascertained by planting 24 of the burs in which the individual seeds are contained; twenty-two of these burs put out, some one and others more plants.

The Sugar Beet as fall and winter food for cattle of all kinds, merits the attention of farmers in every part of the Union. Compared with turneps it is more expensive in respect to land, as the beet occupies the soil all the season, and turneps require only a few of the fall months; the superior quality and greater certainty of a good crop, leaves the comparative advantage in favor of the beet, and the culture does not interfere with raising turneps; in a good system of farming both should be attended to, because, the wintering stock entirely on straw, hay, and corn, is expensive, and cattle do not thrive so well as when a portion of their feed is Turneps, Beet, Cabbage, or something green and juicy. The cultivation of most green crops greatly refreshes and improves all soils. Beets and turneps thrive on light lands, and that species of soil frequently possesses great power in giving vitality to seed; the sprout or "braird" is very vigorous and fresh, but there is a deficiency in the nutritive principle that is required to bring forward a profitable crop of wheat, oats, barley, &c., but they acquire this by being frequently put under green crops; indeed keeping the surface as much covered with foliage, such as clover, turneps, beets, potatoes, &c. under most circumstances will favor the improvement of land, and their direct tendency being to produce manure, the farm is put in good condition; seasons may be a little too dry, or too wet, cold or hot, still the green crops and manure insure to the farmer an abundant harvest.

The length of this advertisement is not in keeping with the sale of a small quantity of seed; the object is to present to the farmers a subject that merits their attention, with a view to enable us to raise our own food from our own land. So long as we are dependant on foreign countries, and foreign labor for food and clothing, it will be a hard task to keep money and public affairs in a wholesome condition.

Our ambition ought to extend beyond the absolute necessaries; there can be no good reason for farmers not having about their houses, a few soft-shelled Walnuts, [Juglans,] Maron Chestnuts, [Tagus Castanea,] Grapes, &c. In the case of walnuts all that has to be done, buy a few that are fresh, and these can be had at the fruit stores, put the nuts about an inch under ground at the commencement of or during the winter, on the place which they are to occupy, and protect the tree. In ten or twelve years it will commence bearing; thus farmers will ornament their places and increase their wealth and comfort.

JAMES RONALDSON,
No. 200 S. Ninth st. Philadelphia.

Letters and remittances, post paid, will be promptly attended to.

P. S. Editors who take an interest in agricultural affairs, will confer a favor on the advertiser by giving the preceding a place in their papers.

High Price of Bread Stuff.

Most people are astonished at the present high price of the "staff of life." As the crops had been abundant throughout the country as accounts stated, it was thought that bread stuff would be uncommonly low. Some farmers thought last spring that so much grain would be raised that wheat would be as low as one dollar a bushel and that the business of raising it would not be profitable. What is the cause of the high price of bread stuff when there is an abundance, is a question often asked. In the first place the crops have not been so abundant as has been represented. In the southern states the crops have not generally been large, and in our own state they have been less than generally imagined. We heard of some farmers sowing 50, 60, 100 or 150 bushels of wheat each, and we were all expecting bread enough and to spare; but we did not consider that where one farmer sowed 100 bushels of wheat there were 100 farmers that sowed none, and were ready to consume double the amount of the surplus grain of him who raised great crops.

Though the crops of wheat have this season been far greater than usual in our state, yet there are but a few counties that have raised enough for their own consumption. York and Cumberland have, we believe, fell far short of that. One great cause of bread stuff being so high is that the producers generally throughout the country, see the important station they hold, as they feed all, and they are determined to have high prices or not sell, and they are an independent class well able to hold on till hungry consumers will pay a good price. At present it is a hard case for consumers to pay so high, money is very scarce and they are generally poor. The farmers are now independent and wealthy; and if a greater number do not become farmers, all other classes will have to pay a high price not only for bread stuff but for all other kinds of provision. These remarks are made for the purpose of showing the importance of every person who is not profitably engaged in other business to give attention to agriculture and raise a part or all the produce and provisions necessary for his consumption, for we believe that the day is far distant when provisions in general will be as cheap as they were a few years ago.

Let who will rule, let us have a specie or paper currency, banks or no banks, there will be frequent changes in the mercantile and manufacturing business, and most persons who do not raise for themselves the necessaries of life will occasionally feel the unpleasant effects of *hard times*. There is no class so independent, wealthy, healthy and happy as farmers. Some of them are deficient in one important thing, that is contentment; they are not so well contented as they should be, and therefore not so happy as they might be.—*Yankee Farmer.*

COMMUNICATIONS.

Farming in Michigan, &c.

Mr. Tucker—Having been a reader of the Farmer for these two years past, I feel it my duty at least to give my testimony in favor of such publications, knowing that I have derived much benefit from a perusal of the Farmer. Although circumstances prevent my entering fully into, or testing, all the various experiments and improvements recommended in it, yet I find great advantage in adopting, even partially, much of the advice given in it. I am a practical farmer, and have pursued until recently, a course of experiments, almost exclusively original, and have succeeded in making many improvements upon the common course of farming. I have always been aware that manures and plaster were very beneficial to crops; but not knowing their properties, as ascertained by chemical operations, I have used them, as I presume many others do, promiscuously or at random, thus losing a great share of the benefit that otherwise might have been derived from their use; and I am sensible I have lost many crops by putting them on soils not adapted to their growth, and not knowing the cause of failure, have repeated the experiment with the same ill success. All of this for want of a knowledge of the chemical qualities of soils. Although the study of agricultural publications may not answer fully the want of personal knowledge upon these subjects, yet enough can be learned by the common farmer, if put in practice, to render his agricultural pursuits more sure of success. Every farmer ought to understand Chemistry, and I think the time is not far distant when its study will be thought as indispensable for the farmer as common Arithmetic. I hope soon to see it, with a full system of farming, introduced into our common schools. The reasons I have mentioned are of themselves sufficient to recommend the Farmer, or some other agricultural publication, to the notice of every farmer. But there is much else in the Farmer besides the analyzing of soils and manure, &c., which attracts my attention, and the perusal of which proves interesting and useful to me, such as the results of experiments on the various modes of Agriculture—the various modes of preparing seeds—times of sowing and planting—hints and remarks upon feeding and fattening cattle and swine, and taking up the volume for a year I find something interesting and instructive upon all the concomitant circumstances of farming. I have been one of those opposed to book farming, and my prejudice was only removed by reading the *Farmer*, and so much are my views changed on the subject, that I would not now forego the privilege of reading a periodical publication on this subject if I had to pay $5 instead of 50 cts. for one.

As I find myself gratified by reading statements of practical farmers on various subjects connected with their business, I will give you the result of my own experience in growing some crops the past season. I will commence with my wheat, as that is the staple article with me. I sowed 20 acres on fallow ground, which was plastered in the spring, and then ploughed most of it three times, a thick growth of white clover being ploughed under; sowed 1½ bushels to the acre; plaster was sowed upon the wheat in the spring again; and notwithstanding its unfavorable appearance from the hard winter, I harvested a good crop, ranging from 20 to 30 bushels per acre. I also sowed about fifty acres on wheat and oat stubbles, ploughed once—harvested about 10 bushels per acre, as much as any one ought to have from such husbandry.

Oats were an excellent crop here this season.

Owing to the successive failure of the corn crop for several years past, very little corn was planted here. I planted about 2 acres—rows 4 feet apart, hills 1½ feet, in light drills—put plaster into the hill before covering—tilled with the cultivator, no earth around the hills—got something over 50 bushels to the acre.

My Potatoe crop was a mixture of experiments. I raised over 1500 bushels. Some I planted in drills, some in rows one way, hills 18 inches apart the other, and some rows both ways 3½ feet apart; some I manured in the drill, and over some of the ground I spread manure. I think the most benefit is to be derived from manure on potatoes by spreading it and ploughing in. Where I manured in the hill, I had the best potatoes, where the manure was put in first, though this part of the field looked very unpromising for several weeks, being very slow in rooting. I had about 300 bushels to the acre. I should have had several hundred bushels more had I used different seed, a large proportion of which were the pink-eyed, which will not yield more than two thirds as much as the orange, flesh colored or Philadelphia. In the culture of my potatoes, I used the cultivator, followed with the hoe to cut up what weeds were left. No earth drawn around the plants. I went through them twice in this way, which left them very clean. I am well satisfied that this mode of culture is altogether better than the old way of ploughing and hilling.

I have this season for the first tried the Ruta Baga crop. I sowed, as I find by after measurement, 115 rods ground, in an orchard, trees so large as to injure the crop materially; sowed in drills 20 inches apart—ground prepared by spreading five loads long manure, and deep ploughing and draging—drills marked by hand, and seeds sowed from the thumb and finger, and covered with a rake head—went through them once with a hoe, and then sowed on them one bushel of plaster, broad cast. The whole operation together, with seed, rent of land, and securing the crop, cost me $25,81. When gathered, I had 533 bushels, which reckoning them at 20 cts. (as I have seen them estimated in some calculations of this kind) would amount to $106,60, showing a profit of $80,-79. I think the plants were left too thick when they were hoed, being not more than from 6 to 10 inches. If they had been left 12 inches I think the crop would have been much better. I am however so well satisfied with this crop that I think of going into the culture quite extensively next season. Michigan.

Bloomfield, Oakland co., Michigan, Dec. 5, 1837.

On the Culture of Ruta Baga.

As the ruta baga and all other root crops are gaining, especially in this country, I will give you the result of my experience. I have raised the ruta baga more or less for seven years past. My usual way has been to sow on new timbered land, without ploughing. I have succeeded some years admirably, and some not so well. I have never attempted a crop of turneps that would not have cleared me $25 per acre. Some years the crop has cleared over $100 per acre.

I propose to give you the result of 1¼ acres that I have raised this year. The field was wheat stubble, timbered land, which was not ploughed for the wheat crop; the soil a black sand mixed with loom. The piece was plowed in the spring, then left until the first week in June; it was then ploughed and harrowed, the roots, &c. cleaned from the ground, and 4 oz. of seed sown broad cast and well harrowed. After they got into the rough leaf, they were thinned and cleaned from weeds. This is all the cultivation, with the exception of a few hours in August, pulling weeds around stumps, &c.

The result was, I gathered 800 bush. at 15 cts.	$120 00
Dr. to expence preparing ground, and sowing,	$6 00
" 4½ days weeding and thinning,	4 50
" 6½ days gathering,	5 00
	$15 60
The net proceeds of 1¼ acres of land,	$104 50

No farmer would be wise in selling turneps at the price stated above. I count them equal to corn in the ear, that is, a bushel of turneps are equal to a bushel of ears of corn.

Experiment in the Culture of Carrots.

I want to say a few words on raising Carrots, as this year is my first experiment. A friend of mine last winter was advising me to sow some carrots. From his experience he believed he could raise more carrots than turneps from the same land, and he believed they were worth more. Being a friend to the ruta baga, I was slow to believe the carrot could be made as profitable. He succeeded in getting me to promise to sow an acre by his giving me the seed. I sowed about ⅘ths of an acre in the same field where I sowed my turneps the year before. I sowed about the 10th of May. I had so little faith in the crop, I would not sow more than half the seed my friend gave me. I gave what I had left to one of my neighbors. My carrots came up very well, but I was so faithless in the crop that I neglected them until after I had hoed my corn. I examined them and thought it not worth while to weed them, but I was overpersuaded by my hired man. We spent nearly four days works in hoing them—the weeds had got such a start that we destroyed the carrots altogether on one third of the piece. This is all the cultivation they had. This fall, to my astonishment, on gathering them, I found I had a little more than 200 bushels. It was not uncommon to find them weighing from 7 to 9 lbs. I was led to weigh some of them by seeing a piece in the Farmer of some one showing you some that were very nice weighing 2½ to 3 lbs.

Cr. by 200 bushels Carrots, at 25 cts.	$50 00
Dr. to preparing ground and sowing,	$2 50
" weeding and thinning,	4 00
" six days gathering at 75 cts.	4 50
	$11 00
Nett proceeds of three eighths of an acre of land,	$39 00

I have made calculations according to the prices that I sold them in the field. I find them to be very valuable for milch cows. I shall make some experiments in feeding turneps and carrots and the result I shall record.

Yours respectfully, A. Ford, Jr.

Union District, Michigan, Dec. 11, 1837.

Setting Milk for Cream, &c.

Mr. Tucker—Having found much satisfaction in reading the communications of others in the Monthly Genesee Farmer, I have concluded to offer some of my experience in the great field of Agriculture. And first, I will state my plan in setting Milk for Cream, which I consider much more convenient than the common way. My first education in this respect, was, of course, to set the milk in broad shallow pans, so that it would stand thin as well as cool; but about ten or twelve years ago my milk became too plenteous for my pans, and I was driven to the necessity of setting my milk in high earthern pots, such as we use to keep cream in. When we commenced this operation, I told my wife that we should get but little cream from those pots; yet we had no other way to save our milk. But to our suprise we found the high pots to produce as much cream in proportion to the quantity of milk as any other vessels. Encouraged by this result, we adopted the plan of setting our milk in common 8, 10 or 12 quart tin pails, which would occupy but little room even for the largest dairies. We found these pails much more convenient, being much easier skimmed, and easily removed from place to place by the bails. Ever since we commenced this practice, our butter has commanded the highest price in market, and we have proved beyond all doubt that the cream will rise as perfectly 10 or 12 inches deep as in any other way.

Another circumstance it may be proper to mention. Having found some difficulty by reason of some of my cows in the latter part of the summer, refusing to give their milk freely in the morning, so that I could get their milk but once a day, which dried them up very fast, I sought for a long time for a remedy by reading and conversing with my neighbors, but no remedy could I find, until at length, instead of salting my cows twice a week, I furnished myself with a box about six inches square in the clear, into which I put a handful of salt, and took it every morning with my pail, letting the cow partake of the salt while I was milking. I have continued the practice, salting all my cows every morning, and beside effecting the cure of their holding up their milk, I find that they give an increased quantity, so that I consider myself richly rewarded for the extra trouble. Elias Sprague.

North Boston, Erie Co., Dec. 18, 1837.

Do not Discontinue your Subscriptions for the Genesee Farmer.—No. 2.

Addressing myself as before, I proceed to treat the subject of my discourse. In my last, I remonstrated against your discontinuing subscriptions for the Farmers. Reasons were then offered, and others remain still to be offered. In point of economy, loss and gain being consid-

ered, there is a wide difference between subscribing for agricultural journals, and common newspapers, or other periodicals with which the country is now flooded. The latter may be useful to you, in furnishing political and other useful intelligence, thus enlarging the boundaries of your intellect. You may too, in the acquisition of useful knowledge, be compensated for the money you pay for them. But in no way either directly or indirectly, do they, in ordinary cases, make any accessions to your pocket. The money paid for them never comes back. Not so with the Genesee Farmer. That too contributes, no less than other periodicals, and more than most of them, to the enlargement of your intellect, and at the same time provides, by its own peculiar contrivance, for bringing back the money which you paid for it, with increase. Hardness of times, and scarcity of money, may form a sufficient excuse for discontinuing subscriptions for common newspapers, and other periodicals. But not so, when the claims of the Genesee Farmer are considered. Money paid for *that*, although at first it makes a small draft upon your pocket, as it does to sow wheat, plant corn, &c. yet its tendency is, to replenish your pocket. Nor in general, is it slow in making its returns. In most cases, it makes them as promptly as any other investments.

My opinion then is that, whether your circumstances will, or will not, justify you in paying money for common newspapers, &c., you ought, by all means, and at all times, to keep yourselves supplied, each one of you, with an agricultural periodical. I verily think that, in the case of a large portion of the agricultural community, it would be better, if but one periodical be received in a family, to have that *one* be the Genesee Farmer, or some other agricultural journal. I speak here of periodicals, treating of secular subjects. To farmers, under the peculiar circumstances, imposed by these modern times, I consider agricultural periodicals as indispensable. Without the lights and the help to be derived from such periodicals, no one can, at this age of improvement, long sustain the reputation of an intelligent farmer. Much less will he be able, in the improvement of his husbandry, to keep pace with the general improvement of the times. Most certainly, those who neglect the use of agricultural periodicals will soon find themselves, in many mortifying respects, on back ground. I have still many more things to say, and mean to speak to you several times more. Do'nt discontinue your subscriptions for the Genesee Farmer.

ECONOMICUS.

MARL.

Compact limestone, by increase of argillaceous matter, passes into marl. Marl is essentially composed of carbonate of lime and clay, in various proportions. But some marls are more or less indurated, while others are friable and earthy. In some, the argillaceous ingredient is comparatively small, while in others it abounds, and furnishes the predominant characters. The calcareous and argillaceous marls unite by imperceptible degrees, and the latter sometimes pass into clay. Marl frequently contains sand and some other foreign ingredients. Some divide marls into calcareous and argillaceous, others into indurated and earthy. The hardness of indurated marl is inconsiderable. In most cases, it may be scratched by the finger nail, and may always be easily cut by a knife. It has a dull aspect, like chalk or clay, often with a few glimmering spots arising from sand or mica. Its fracture, usually earthy, may also be splintery or conchoidal. It is opaque; its color commonly gray, often shaded with yellow, blue, brown, black, &c. It also presents shades of green and is sometimes reddish or yellowish-brown. Specific gravity usually between 23 and 27. It occurs in masses either compact or possessing a slaty structure. All solid marls crumble by exposure to the atmosphere, usually in the course of a year, but sometimes a longer period is requisite. The same changes generally take place in a very short time, when the marl is immersed in water, with which it forms a short paste. It crumbles more easily, and forms a more tenacious paste in proportion as it becomes more argillaceous. It is always more or less easily fusible. All marls effervesce with acids, sometimes very briskly and sometimes feebly, according to their solidity and the proportion of carbonate of lime, which may vary from 25 to 80 per cent., indeed, in the argillaceous marls it is often much less. Earthy marl differs from the preceding by being more or less friable, or even loose; but they gradually pass into each other. Like the indurated marl, it may be either calcareous or argillaceous. It sometimes greatly resembles clay, but may be distinguished by its effervescence in acids. Marl, like clay, belongs to both secondary and alluvial earths, where it occurs in masses or in beds. Hence, it is found associated with compact limestone, chalk, gypsum, or with sand or clay. It contains various organic remains, as shells, fish, bones of birds and quadrupeds, and sometimes vegetables. The organic remains are numerous and extremely interesting in the marly strata examined by Cuvier and Brongniart in the vicinity of Paris. Marl is found more or less in most countries. Its most general use is as a manure. The fertility of any soil depends in a great degree on the suitable proportion of the earths which it contains; and whether a calcareous or an argillaceous marl will be more suitable to a given soil, may be determined with much probability by its tenacity or looseness, moisture or dryness. To employ marls judiciously, therefore, the farmer should be in some degree acquainted with the chemical properties or constituent parts of the marl itself, and with ingredients of the soil. He may, in general, determine the existence of marl by its falling into powder, when dried, after exposure to moist air. To ascertain the proportion of its ingredients, the calcareous part may be extracted from a given weight of the marl, by solution in acids, and the residue, being dried and weighed, will give the quantity of clay with sufficient accuracy.—*Encyc. Amer.*

From the Hampshire Gazette.

Bees.

MR. EDITOR:—I lately observed an article in the Gazette, from the Vermont Chronicle, respecting the security of bees from the ravages of the bee-moth. In answer to the inquiries of the writer, I would observe—1st. Early in the spring a mound is prepared, or in other words, the ground is raised sufficiently to secure the hives from injury by rains; it is then beaten down, and smoothed on the top, and made sloping on each side to carry off the water, and rather descending from one end to the other; of a length proportioned to the number of hives there be placed, allowing room for some young swarms to be set by the side of the old ones, as they come out. Boards, or some kind of covering are fixed on the top of the hives in a slanting position, to carry off the rain, and secured by some weight to prevent the covering from being removed by wind. In regard to hives of bees remaining under the trees where the swarms collect. The surface of the ground near my house is rather descending, on which there are a number of fruit trees, such as apples, &c., but where the land is nearly level, a spot is easily raised, by hauling up some earth and beating it smooth on the top, on which place the hive, as heretofore stated, is placed. I generally practice setting my new swarms in a line at the end of the other hives of bees.

I consider it is of no use and no security to an old hive, already taken possession of by the bee enemy, to be put on the ground. The reason I give that bees are more protected on the ground than elsewhere, is the following:—The millers when first entering a bee hive, appear to be rather timid, not venturing at first above the base. They generally deposite their eggs at first, around the inward edges of the hive, and if there are any crevices between the hive and the board or floor that it stands upon, they are quite sure to secrete some of their eggs there; and it will be but a short time before the cots, (or whatever they may be named,) that enclose the worms may be seen, from which the grubs soon make their escape. The grubs will soon creep into the hive, unmolested by the bees, and begin their depredations on the honey and young bees. The grubs seem to prefer the young bees that are in the cells to feed upon at first, instead of the honey. A hive of bees that is attacked by the bee moth is not always destroyed the first year, but is very sure to be the second.

As to the risk of trying the experiment above stated, with one new swarm at least, can be but trifling; and I can state it as a fact that may be relied on, that for some reason or other, I have sustained no injury from the millers, since I have practised the method above deccribed.

DAVID CHANDLER.

South Hadley, Dec. 18, 1837.

GYPSUM,

Sulphate of lime, or common plaster of Paris, is found in a great variety of forms. It is either in regular chrystals, in which form it is sometimes called *selenite*, or in large chrystalline plates and masses, which are perfectly transparent, and as pure as the finest plate-glass; or it occurs in fascicular or radiated masses, which are also chrystalized; it is sometimes found in snow-white, scaly flakes, like foam or snow; it is sometimes semi-transparent, like horn; and, lastly, it is met with most commonly in large, fine or coarse-grained compact masses, forming rocks, and constituting large and extensive strata. In this form, it exhibits a great variety of colors—white, red, brown, blueish, white, &c. The variety of gypsum last described, constitutes all the hills and beds of this mineral, which are so frequent among secondary rocks, and in what are called the *salt* and *coal formations*. It occurs rarely, if ever among the primitive rocks, and not often among those of the transition class. It is always found associated with the rock salt, whereupon salt-springs are found. It contains but few vegetable or animal remains; those that occur, are chiefly bones of quadrupeds, amphibia, fresh-water shells, and vegetable remains. Caves are of frequent occurrence in gypsum. The purer semi-transparent specimens of gypsum are used for ornamental works, as vases, urns, &c., and for statuary; for which purposes its softness makes it very useful and easy to work, but this also renders it difficult to polish. In this last form, it is the alabaster of the arts. It constitutes the material used in making the fine plastering for the internal finishing of costly edifices, and gives the walls a most beautiful whiteness. It is also used, after being burned, for the composition of stucco-work of all sorts.—But the great and important use of gypsum, or *plaster*, as it is usually called, is for manuring grass and grain lands; in which cases it is truly invaluable. And it is inconceivable how great an addition of grass will be obtained, by the sprinkling a peck of ground plaster upon the acre of land.—It is certainly the cheapest and best manure for grass and grain. It is found in all the countries of Europe, and occurs in very extensive deposites in New York, and in the Western States, in all which great quantities are dug and sold for the uses above described.—*Encyc. Amer.*

Blight in Pear Trees.

Mr. Samuel Reeve of Salem, N. J., has discovered a method of preventing the inroads of this most dangerous disease, which has so often proved fatal to the hopes of the enterprising farmer and horticulturist. The result of his observations, which present an entirely novel view of the subject, were laid before a meeting of the Horticultural Society held in this city on the 21st inst. It will be observed that the experiments of Mr. R. refer principally to the pear tree, as that is more liable to suffer from the Blight than any other. A personal conversation with this gentleman, together with mature reflection upon the subject, has satisfied us that the preventive suggested, could be successfully applied to all fruit-bearing trees *subject to blight*. The discovery strikes us as being of peculiar importance at the present time, as within the last few years, the decay of fruit trees, in the vicinity of this city has been altogether unprecedented—so much so, indeed, that in relation to one species (the apple) we have heard a distinguished horticulturist observe, that in less than ten years there would not be a single thriving plant of this description within as many miles of the city of Philadelphia. This however may be referred to various causes.

Mr. Reeve observes in substance, that from a series of experiments he had been enabled to check the blight of the pear trees for a number of years, by finding the disease to originate from the root, which being of a very porous or spongy nature, absorbs moisture very rapidly, and if the wood of the pear grafted thereon, be also of a porous nature, a

rapid growth is the consequence, which is the reason why such pear trees outstrip others of a more close or compact wood; the latter he has found not to blight to as great a degree as the former.

The pear tree requires a soil that is of an even cool temperature of moisture, the sudden transition from wet to dry predisposing the trees to blight. Other cases occur when the tree has been in constant tillage, with a sudden transition of the sward, always terminating in blight in a greater or less degree.

Mr. R. says he has seen the blight attack them after accustomed to stand in sward by a sudden cultivation or tillage, and that in all cases the pear tree does best by keeping the ground cool, and in an even temperature of moisture.

Many other fruit trees will bear all the sudden transitions from wet to dry and dry to wet, with tillage and without it. But not so with the pear, the sap flowing through the porous pear roots rapidly in the spring, and then suddenly checked by by drouth causes the blight, and the sudden flow of the sap in the summer, after having been checked, will generally cause a rapid progress of the blight.

The plan to be adopted is, that the roots of the pear be kept in an even and cool temperature of moisture from the first of May till the sixteenth of September, by covering the ground with hay, stones, &c. three or four feet further out than the roots continue to extend, so thick as to prevent the growth of grass.

The black spots in the wood of the part diseased, originate from an overplus of the sap, which spots are the effect of disease. The pear tree ought never to be luxuriantly pruned, but moderately every year in July or August, in a dry season.

Mr. Reeve further informs us that for a number of years he has carried this plan into execution, on an extensive scale, and in every instance, he has succeeded in checking the progress of the disease. Any way that the rapid growth to a medium can be checked, and so kept restrained from spring to fall, will be conducive to the longevity of the pear tree. The pear tree will do well on quince, thorn, and apple roots, the blight not attacking them as when grafted on pear. The root of the pear is more spongy, and absorbs the moisture more readily than the quince, thorn and apple, causing the difficulty of keeping the pear to a requisite medium growth. On examining other fruit trees affected with blight, the wood will be found soft and very porous when in a wet time, having had an overflow of sap, which caused a surfeit or blight.

The more hard and compact the wood is, the less liability there is of blight; the seckel pear is of that description, and will not require that attention in guarding against the disease as some others.—When the roots of the pear are compact and less porous than ordinary, the hot ground with much rain, has not that effect in blighting, which is the reason some trees have not been known to blight. In a general conclusion on the suject, the ground should be kept cool through the summer, when an excess of rain will not or rather cannot cause or create the disease. It may be proper to observe that no variation of size, soil or situation will affect the success of this experiment.

Mr. Reeve has promised us a further communition on the subject. The above remarks are all essential at the present time, and we trust that our friends in the country will give them a fair trial.—*Phil. Satur. Eve. Post.*

The primary importance of agriculture to all classes of community, and to all the varied and substantial interests of mankind, is pretty generally understood, and universally acknowledged, by all who give the subject a moment's consideration. But the *pleasures* and *profits* of tilling the earth, when compared with many of the other avocations of life, are not so well understood, nor so favorably viewed by the mass of young men, who are just entering and selecting their occupation for life. It is conceded that in the *lottery* of life, neither agricultural or mechanical employment offer the chances of great pecuniary prizes, equal to some other avocations, neither are the chances for blanks of misfortune, injurious fluctuations, sudden reverses, and total pecuniary ruin so numerous. Taking the whole together, there can be no doubt, but that rural industry can offer advantages and inducements, fully equal to those of any other occupation. A feeling of independence is and ought to be as dear to us as any other, of which we are possessed, and we hazard nothing in saying that of all men, the farmer, if he does his duty, can enjoy it in a greater degree, than he who follows any other avocation. He need fear no competition, but is sure of a market for all his products. His crops are so various in kind that the vicissitudes of the weather do not alarm him What may seem to injure one, improves another, so that frequently he is a gainer by what he supposed would materially tend to his disadvantage. His occupation is of all others the most healthy, and from having upon his farm all the necessaries and comforts, and many of the luxuries of life, he has within his reach, and at his command, more of the common enjoyments, which if properly appreciated and rightly used, constitute the elements of happiness, than any other state of equal mediocrity, while the contemplation of the works and economy of nature, incident to his occupations, will have a tendency to enlarge the sphere of his observation, expand his mind, and furnish him with an almost inexhaustible fund of amusement and instruction.—*Penn. Far.*

I will give you my experience and opinion, upon the manner of keeping hogs in health while they are fattenning. I have lost in years back a great many hogs—had others sick and languishing, so that they would not fatten; and been obliged to turn them out of my pen. I always observed that when I did so, they either died immediately, or if they lived a few days, got well. I always observed too that my hogs in the pen would eat and chew with eagerness, all hard substances such as peach stones, bones, and even small stones; and that they were particularly fond of coals, such as had by accident, got from the fire into their feed. I also observed, that whenever I let a sick hog out of the pen, he would go to eating such things, and even the ground itself. I then thought of trying the experiment, and collected a peck of coals from my ashes and put them into my pen. They were immediately devoured. I gave them more, until my hogs had eaten at least two quarts each. I thought it did them good, and continued to supply them daily with them. I have since that time (two years ago) fattened more than fifty hogs, and never had a sick one, nor one whose pork has been measly or affected with any disease. I believe it to be an effectual remedy, for a very serious difficulty with farmers. My neighbors to whom I have communicated my plan, have tried it with the same success, and if you please, you may give it publicity in your paper.—*Ib.*

Apple Pomace, as a Manure.

Mr. Holmes—I noticed in No. 44 of the current vol. of the Farmer, a piece dated at Vassalboro'—subscribed "B"—recommending cider pomace, or apple pomace, as *valuable manure.* So far I agree with him. But as to the process of making manure from it, he will allow me to suggest a vast improvement. It is a fact that if placed in the barn and not in the road, and fed out to cattle in suitable quantities at a time, that it is an excellent, nourishing, valuable food for them. Thus fed, the manure is of course made, and mixed according to his liking. If considerable quantities of pomace are deposited together in the barn, it will be prudent to feed it out soon, or spread it thin, as there is danger of its fermenting and thereby being injured, unless it freezes—in which case it may be kept for a long time, and cut up for sheep, &c. at pleasure. A farmer near me, says he has found it a healthy and happy change for his large flock of sheep through the winter. C.

Winthrop, Dec. 11, 1837. [*Maine Far.*

THE MANUFACTURE OF SILK A HEALTHY Employment.

It is hoped in consideration of the encouragement given by our State Government, in offering a bounty on the Culture of silk, about sufficient to cover the whole expense of *gathering* the leaves, *feeding* the worms, and *reeling* the silk, in effect, making every pound of silk a clear profit, and from the most certain and sure return, of a greater profit than from any other agricultural pursuit—that the amount of silk raised another year in the Old County of Hampshire, shall tell on the page of our history, a story that shall never be forgotten. It is also hoped, that every friend to the culture of silk, will appropriate not only the *small*, but as large a *mulberry patch* as he can, and receive the reward of his investment and industry, in a return of silk, far exceeding his most sanguine expectations; and in further consideration, that the manufacture of silk, whether done in families or factories, is considered a healthy employment in those countries where silk is grown and manufactured—far more healthy than the manufacture of wool, flax or cotton. It is understood that there is a Law of Great Britain, (where, however, they do not grow, but manufacture immense quantities of imported silk,) regulating the employment of children in Factories, prohibiting any child under *nine years* of age, being employed in any *Woolen*, *Flax*, or *Cotton Factory*, and where a child between 9 & 13 years is employed, the certificate of a Physician shall be required, as to the bodily health and appearance of the child, and a school master's certificate, that the child had attended school two hours every day, that said child shall not be employed in a factory over 48 hours in a *whole week*, not over *nine* hours in any *one day*; yet the same Statute provides, that children may be employed 10 *hours a day* in *Silk Factories.* It is therefore a fair inference, that the Silk business in England is considered a healthy employment. Taking it for granted, that the employment is healthy, and is known to be pleasant and profitable, where then can be the injury of employing children five or six weeks, in gathering foliage and feeding worms, and in that short time, to earn something to pay their schooling and clothing, and perhaps something towards their board, and something towards procuring trifling articles, always desired by children? Children are usually desirous of earning something to call their own, and expend according to their own fancy, where then is the parent, having the ability, who would not devote a few rods of ground in the garden or near the house, and set the same with mulberry trees, for the gratification, the amusement, and profitable employment of his children?

There is a law of the Commonwealth, to go into operation April 1837, which provides that *no child* under the age of 15 *years*, shall be employed in *any* manufacturing establishment, unless the child shall have been instructed by a *qualified teacher*, at least *three months* next preceding any and every year, in which such child shall be employed, under the penalty of 50 *dollars* for each offence.

Had the law restricted the child to a certain number of hours of emp'oyment each day, it would have been an improvement, and it is hoped our next Legislature will take this subject into consideration.—*North. Cour.*

PEACH TREES.

Peaches are of two kinds; the clearstone and the clingstone, but there are good varieties of each. The same sorts can only be raised by grafting, or inoculation: This may be on apricots, or on plumb trees, and make the grafted trees longer lived. The trees should have a warm, dry, fertile soil: a sandy loam is best. If the spot where they are planted be sheltered from the northerly winds, it will be the better. To raise the young trees, take stones that are fully ripe, and plant them in October. They will come up and grow to a good size in the course of the summer. They are to be kept clear of weeds, while in the nursery. At a year's growth they may be grafted, or inoculated, and after two summer's growth, they may then be transplanted. This may be done when the leaves have fallen in autumn or in the spring. Take plants with one strong clean stem, or, if they have two, cut one away, however fair. Let the downward root be cut off, in order that the tree derive its nourishment from earth nigh the surface, which will make the fruit less crude and finer tasted. Be careful not to plant the trees too deep; for this is injurious to the fruit. Let the pruning of the new planted trees be omitted, till they have taken root.

In making a proper selection of trees, from which to graft or inoculate, a due regard should be had to three essentials.

1. To obtain the grafts, or buds, from trees bearing the finest fruit.

2. That this fruit should ripen at different times, from the earliest to the latest of the season for peaches.

3. That the grafts or buds be taken from trees which are plentiful bearers; but not from such as bear so plentiful as to be broken by their fruit.

But, perhaps, the too plentiful bearing of trees is a quality not properly descendible to those which are raised from them, by grafting or otherwise. It would be well to ascertain this point by experiment.

From the Maine Farmer.

THRIFTY PORK.

Mr. Holmes:—As your useful paper is designed to promote the Agricultural interests of Maine, by communicating not only *theoretical*, but *practical* knowledge, I thought the following statement might be of some service to our farmers; at least, it will show that "some things *can* be done as well as others," even in this "*cold country*," where it is said by *some*, that people cannot get a living by farming and stock raising.

James Stanley, Esq., a neighbor of mine, butchered two pigs on the 27th ult., one of them when dressed, weighed 315 and the other 255 pounds—they were seven months and 12 days old. These pigs were from a litter of seven, partly from the "Newbury White" breed; Mr. S. owned the sow which brought them. She was lamed when the pigs were about two weeks old, so that it became necessary to kill her; after which these two pigs were fed upon new milk until they were about four weeks old, after which they had no extra keeping, their food being the skimmed milk from one cow, boiled and raw potatoes and slops from the house, together with a little corn occasionally. These pigs were kept up so as not to range about. The largest one cut more than six inches clear on the shoulders.

This fact shows that if our farmers would take the trouble to get a good breed of swine, and tend them properly, their profits would be more than double to what they generally are. J. T.

Farmington, Dec. 1st, 1837.

From the Maine Farmer.

Exercise Useful to Sheep.

Mr. Holmes—In one of your late papers you say "work your Bulls." This I have no doubt would be beneficial to them. There is no animal but what would be benefitted by exercise. In order to obtain the greatest degree of health that man is capable of, it is necessary that he be temperate in all things, and that his exercise be as much as it can be without wearing his constitution, or such an amount of exercise as will produce the soundest and sweetest sleep. I am led to believe that the same is necessary with the lower order of animals. We are apt to oblige the horse and the ox to labor more violently than is good for their health. But I have no doubt that moderate exercise with them would insure better health than none at all. Apply the same principles to sheep, which are not and probably never ought to be in the habit of doing labor. The migratory flocks in Spain are made to travel about four hundred miles twice a year, spring and fall; but in this country they have been kept nearly without exercise in the winter on account of our deep snows, and within small pastures in the summer. I am the owner of a goodly number of descendants from what has been called old fashioned Merino, and I am satisfied they do not possess the energy that the first importation did, from which they descended in a direct line, and I have carefully avoided incest in my flock. May it not be that we are fast losing the health of our fine wooled sheep, without knowing or having any mistrust of the cause. If so, it is time we did understand the cause, for I believe when we lose the fleece of the merino we lose much of the profits of sheep husbandry. If my fears are founded in fact, how is the evil to be remedied? New importations of both ram and ewe may do it. Mixing with the South Downs may be of service, for they are a breed that in England, on their own native Downs, have to cut their own fodder, as the saying is. Obtaining from the sea shore such sheep as go at large without being confined, and cross our best bucks with them, might be of service.

I wish some person of more experience than I have, would give me information on the subject. I wish also to hear on the subject in which I have no small interest, both as a wool grower and as a raiser of wheat, for it has been well stated in your paper more than once that pasturing with sheep is the cheapest way to prepare land for that crop.

Winthrop, Feb. 11, 1837. An Inquirer.

DURHAM CATTLE.

It is a matter of surprise, even to some of our agricultural friends, how this improved breed of cattle can be worth the high prices they are bringing throughout our country.

There are many reasons for this. First, they grow larger than our common cattle. Secondly, their flesh grows more abundantly in those parts where it is considered most superior. Thirdly, they fatten more easily than the ordinary kinds. Fourthly, cows of this blood, give more milk—and some think of a better quality. Fifthly, this stock arrives at maturity much earlier than the common cattle of our country.

It has been often remarked that if all the grain and hay an ox or cow of the common breeds eat, before they arrive at maturity, were weighed and measured, and sold, that it would amount to more than the animal would sell for, to say nothing about the time spent in feeding, or the amount of pasturage. We have no doubt that the way cattle have been managed, generally, in this state, this remark would hold good. This, then, renders it important, that every effort should be made by our stock raisers, to economize, by the preparation of food, especially, in this country, where such beautiful crops of roots may be produced, and where so much, that may, with a little attention and preparation, be converted into fodder, is suffered to stand in our fields and go to waste. But more especially would it be to their advantage as soon as possible to get into a breed of cattle, that will come to maturity *earlier* than those they now have.

On this account, perhaps, arises the profit from the Durham Cattle, more than from any other cause. They are said to come to maturity from two to three years earlier than our scrub cattle. This, we have no doubt is the fact, when they are well attended to, and the common breed receive only *ordinary* attention. But there is no doubt, with the *same care*, the expense of feeding one or two winters may be saved by our farmers, if they will procure the Durham Cattle, which together with the profits arising from the other superior qualities they possess, will make the stock raising business in this state, so peculiarly adapted to that branch of husbandry, a most lucrative business.—*Indiana Farmer.*

From the Farmer and Gardener.

Baden Corn.

We are indebted to the Hon. Henry L. Ellsworth, of the Patent office, for the following communication relative to the above corn, which has gained so much celebrity within the last few years.

Near Nottingham,
Prince George's County, Maryland,
November 4th, 1837.

Dear Sir—Agreeably to promise I now write you a few lines to inform you that within the last two years (and never before) there has been a report in circulation that my corn was a later kind. However, for the satisfaction of my friends I have made an experiment this year, which I hope will satisfy every one upon that point. I planted a lot of six acres and a half, as near as I could judge (by stepping) of this kind of corn, the 20th day of May last—my book is now before me. I cannot be mistaken in the date, which is more than a month later than the common time of many persons planting in this neighborhood. I gave it no extra management to hurry its growth, and determined to give it only the common routine of work that I generally give my corn. It is now perfectly ripe and hard, and has been for some time, and no frost could do it any injury in any way, and I believe it will yield as much good sound corn to the acre as any that was planted in the neighborhood any time in April upon land of the same quality. This evidently shows that my corn is a forward kind, and will come to maturity as soon as any other. By the first opportunity I will send you a few stalks of this corn that was planted the 20th of May, and also some that was planted the 1st of May, with the corn on them, as it grew in both the lot and field, and none with less than *four*, and some with *seven and eight good ears on a stalk*—then I will leave you to judge which of them is the better. As soon as it is sufficiently dry to shell and put up, I shall send you twenty or thirty bushels of as good seed corn as you have ever seen. I have not long since discovered something in this corn, which convinces me that I can still make a great improvement on it, by adding much to the quantity and quality of the grain on each stalk. I am now persevering in my efforts, and intend to raise a large crop every year in its purity, to supply all who may apply for it for seed. I have been frequently requested to give a statement of my mode of planting and cultivating corn. As the planting and cultivating of corn is so generally understood, I deem it almost unnecessary to say any thing upon the subject; but to satisfy the wishes of such friends as think they can profit by it, I willingly give it. I first pulverize my land well by good ploughing, and lay it off five feet apart each way. By the first of May, or a few days sooner if the weather is warm, I begin planting—roll my corn in plaster and drop three grains in each hill. As soon as I have done planting, I set to ploughing one row and leave two, and harrow over the field in this way as soon as possible to prevent the corn from washing up in case of heavy rain, which sometimes happens. Then I plough the other two rows at my leisure—as soon as the corn is generally up, I go over and replant all the missing hills: when the corn shows well along the rows to see how to plough, perhaps when it is 6 inches high or thereabout, I then commence ploughing the second time. The best ploughman commences siding with the bar side of his plough to the corn, and goes as close to it as he can, and throws the dirt from it; the other ploughman follows on, to plough up the middle of the rows. Their first furrows throw back and fill up the side furrow, which leaves a soft fresh bed for the young roots to run in. As soon as the field is ploughed in this way I put the hoes in to clean out the hills and to place a little soft dirt around the corn, and at the same time to thin it so as to leave two of the best stalks in each hill. The third time of ploughing I turn the mould board to the corn and go near enough to throw the soft dirt around the stalks—that will answer the purpose of hilling and also to cover and smother the grass that may be springing up on the hills. The fourth time of ploughing over the field I don't go so near the corn, nor quite so deep (in particular the first furrow) for fear of cutting the roots: and my wish is never to let it exceed ten days between the times of ploughing over the field. By this mode of working, the corn has always a soft fresh bed to grow in, and always has a healthy thriving appearance, and I don't remember ploughing it oftener than four times, and if the weather is seasonable, I never miss raising a good crop. I never let the suckers exceed a foot or 18 inches high, before I pull them off, the strength will then run into the stalks, which will cause them to grow larger, and they will produce more and better ears on a stalk; the grains also will be larger and heavier. I have said I planted my corn 5 feet apart each way. By experience I have found it to be near enough for our lands. Four feet apart each way, and two stalks in each hill, is near enough for the richest land with this kind of corn. I like to work my field over the first time after the corn comes up, and the fourth time when I am laying it by, with the *cultivator*—but I make no use of them in wet seasons.

Yours, respectfully,
Thos. N. Baden.

P. S. I can ship any seed that may be ordered each week to Baltimore, if a few days are excepted when navigation is interrupted by the ice.

Fruit Trees For Sale.

THE subscriber respectfully informs his friends and the public that he has for sale at his Nursery in Rochester, Monroe county, state of New York, a large quantity of Fruit Trees, grafted and innoculated with the most approved kinds, now fit for transplanting, which he will sell on the most reasonable terms. SAMUEL MOULSON.
apr 15–tf

N. B. Cash will be paid for a few thousand two years old Apple Trees.

YOUNG MEN.

Regular employment—Occupations—Advice of Sir Walter Scott—Excellence in Profession.

BY HON. A. L. HAYES.

Regular employment is the price of happiness; and the first step, in general, after taking leave of our *alma mater*, is the adoption of a profession. No matter how bountifully Fortune may have showered her gifts, some settled occupation is essential to real enjoyment. Without this, the mind, like an idle sword, is corroded by its own rust. Who has ever known a perfectly indolent, that was not a miserable man? There is in this country no class of men of fortune, whose only care in life is to kill time and squander money, and who, associating together, may keep each other in countenance, though they cannot purchase contentment.

"Vain, idle, delicate, in thoughtless ease,
Reserving woes for age, their prime they spend,
All wretched, hopeless, in their evil days,
With sorrow in the verge of life they tend.
Griev'd with the present, of the past ashamed,
They live, and are despised; they die, nor more are nam'd."

The misery of such a condition was illustrated in the fate of the Frenchman, who, with rank and high connexions, ample fortune, youth, health, repute, and "troop of friends," found life without employment so "weary, flat stale, and unprofitable" —one dull, daily routine of rising, dressing, eating, drinking, sleeping—that he preferred death by his own hand, to its longer endurance. Something of the feeling which precipitated the fate of this wretched suicide, must have been experienced by every man who has had the misfortune to live in the world, without any thing in the world to do. I hold it, therefore, to be of the last importance to adopt an occupation, though I have nothing to say with respect to a choice of a profession, except that it should be such, as one will probably be satisfied with after it is made.

Some difference will always exist in the degree of consideration which various occupations enjoy, owing to the unequal degrees of skill and intelligence required by them; but true ambition would rather impart honor to one's profession, than seek to derive respectability from it. Our country is fortunately exempt from those castes, which separate society elsewhere into distinct compartments, to each of which a peculiar occupation or pursuit is by law or custom assigned. Here all professions, trades and callings are open. The only limitation is imposed by mental or physical inability; and one striking and important benefit of the liberal education you have received is, that it has made you *freemen* in the most extensive sense; for, qualified by it as you are, to enter any profession,

"The world is *all* before you, where to choose."

A man of cultivated mind, and real virtue, can never have his lustre soiled by any honest vocation, well pursued. It is, indeed, far from being a disadvantage, to possess abilities superior to the requisitions of one's calling. By the proper exertion of these he is sure of rising to distinction in his pursuit, and of reaping all the benefit it may confer. A young painter having attracted Sir W. Scott's notice and protection, by some pictures he had produced in his apprenticeship, and was inclined, on the expiration of his indentures, to turn his back on the humble profession to which he had been bred; but, waiting upon his eminent friend with a piece he had commissioned to paint, received this salutary advice; that he should apply himself to the improvement of his profession, as a much more lucrative field of exertion, instead of struggling with the difficulties that he must be sure to meet, for want of sufficient patrimony, in following the higher walks art. The individual to whom this counsel was given, having accordingly turned his talents to study the science of his profession, has produced a highly commended work on the laws of harmonious coloring; and, instead of being a third or second rate artist, trembling with nervous apprehension about the position in which a picture may be hung at an exhibition, as really affecting his prospects in life, is the master of a large establishment, giving employment to a great number of men.

A more illustrious example is furnished by the life of "Scotland's greatest man," himself. When he saw his literary pre-eminence endangered by the declining popularity of his poetical works, and especially by the appearance of Lord Byron as a rival, he, with that good sense in which he so much excelled, resolved to abandon the bright field of poesy for the humbler region of romance. The consequence was, that he became more popular in that career than he had ever been as a poet; and having distanced all competition, erected there the most noble monument of his fame.

I refrain from the attempt to lay down any rule for the choice of a profession, not only because it might be a presumptuous interference with determinations already adopted, or the wishes of friends which ought not to be disregarded, but because I deem it of less consequence what the choice may be, than that the choice should be made and pursued in the right spirit. Excellence in one's art or calling, is the first requirement of professional duty. The disposition to excel, may arise from a calculation of profit or a desire of accumulation; a motive which is honest, and, if the object be personal independence is altogether laudable. It may arise from a desire of distinction or a love of glory, which is a sentiment that deserves our favor, for it has unquestionably been productive of the best and noblest actions recorded in history. It is commonly found in union with a generous enthusiasm, which will not rest satisfied with a mediocrity of exertion which keeps the mind always fresh, active, and vigorous, and exhibits the evidences of improvement to the latest period of life. It is reported of the celebrated Mr. Wirt, who possessed this fine spirit in an eminent degree, that some of his last professional efforts were superior to any of his previous performances; and that this was observable, not only in the substance of his addresses, but even in the finish and decoration of the style. I know not how others may be affected, but to me nothing appears more admirable, than this progressive excellence in advanced age. It is a splendid triumph of mind over matter, and points unerringly to our immortal destination.

Every one should have constantly in view a standard of merit in his profession, and should stimulate his exertions to realize it in his own performances. Let such a standard be as perfect as it may—the beau ideal of professional excellence, for no axiom is more just than that all models should be perfect, though man remains imperfect, that in striving to reach what is *impossible*, he may attain to what is *uncommon*. Thus, by furnishing an example of superior skill and ability, by useful improvements in the practice of his art, or by enlarging the boundaries of the science connected with it, he best discharges that debt which every man owes to his profession.

Extraordinary Wheat.

Mr. Editor—Permit me, through the medium of your interesting paper, to introduce to the consideration of the public a most singular and prolific species of Spring Wheat. Two years ago, Mr. Jeremiah Bowling of this place received fifteen grains of this wheat from a distant part of the Union, which he sowed last spring a year, the result of which was sufficient to induce him to save what he had reaped for seed for another year. Last spring, after giving a small quantity to a few of his friends, he sowed what remained of the product of the fifteen grains, which produced, when gathered, a half bushel and a half peck—the half bushel weighed thirty-three pounds. Some persons may consider this yield almost incredible, but all surprise as to this point must cease, since it is known as an established fact, that more than forty stalks have sprung from one grain. The growth of this wheat is exceedingly luxuriant and rapid, and its blade and stalk are fully as strong and heavy as rye or barley. The grain is about twice the size of the common wheat, and is of a white and flinty nature. I am of the opinion, and I think every practical farmer will also be convinced, when he sees the peculiar energy of its growth, that it possesses in its nature a power which will always shield and defend it against the ravages of the fly—that greatest scourge which has ever visited our fair and fertile Valley. I hope that the attention of the farming community will be directed to this new species of wheat, for I conceive that no pains ought to be esteemed too great to restore to our country that abundant prosperity, for which our farmers now so patiently and so ardently labor. An Observer.

[The wheat here spoken of must be the *Barbary* wheat. We sowed this spring about half a gill of it, which we obtained through the kind offices of a friend, but not a single grain of it came up, owing we presume to its vegetative powers being destroyed by long exposure to dampness in its protracted voyage to this country. Without any exception it was the largest and best looking variety of wheat we ever beheld, which added no little to our mortification at its not vegetating.]—*Far. & Gar.*

Lime—its Uses—and Quantity.

We are gratified to find by recent publications, that the opinion is becoming prevalent among intelligent farmers, that a much less quantity of lime than was formerly used, is sufficient for all immediate agricultural purposes. The extravagant application of it in England, where from 150 to 640 bushels was for many years the quantity put on the acre, served to lead many astray here, and hence the too free use of it. As we have often stated before, we believe that there is no *immediate* benefit to be derived from a greater application than 50 bushels to the acre at any time: the quantity being sufficient to answer all the purposes of melioration for several years: it being competent to give heart and fertility to almost any soil, and with the aid of a *clover ley* to push it, if originally a thin soil, beyond its primitive state of fertility; if fifty bushels then will answer, much of the objection against lime on account of its heavy cost is removed, and the ability to use it is increased fifty per cent., and instead of liming *one* acre, the farmer may lime *two*, an object of high import to one of limited means.

Connected with the use of lime, there is one fact which we desire most sincerely to impress upon our readers; it is this,—that it should never be applied without giving it *material* to act upon. Upon all new grounds, upon grass swards, and upon clover leys, it may be most advantageously and profitably applied. If there be a heavy crop of weeds and stubble on the field, there it may also be used to decided advantage; but let it be applied wheresoever it may, it should have something to convert into a condition of vegetable food, as therein, next to neutralizing the acidity of the soil, does its chief virtue exist. If there be no clover-leys, grass-swards, or crops of weeds, to turn in with it, a very happy substitute may be found in a crop of buckwheat, rye or oats, which as either gets into flower should be turned in with it. Either of these substances will afford full scope to the action of the mineral, and amply remunerate the agriculturist for the time, trouble and expense of providing it. We will venture the assertion, that a field thus treated, which would not yield 7 bushels of wheat to the acre, may in three years be made to produce twenty bushels, and if judiciously cropped afterwards, will retain its fertility for ten or fourteen years. If then this desirable state of things can be produced, should any farmer hesitate a moment in availing himself of all his resources, and of even straining a point, to place himself in a position at once so eligigible and propitious? We think not. Present and prospective profit, alike combine to urge him to the course we have pointed out; nor should pride of occupation be wanting to stimulate him onward to a goal so worthy of his holiest ambition.—*Far. & Gar.*

A large Crop of Mangel Wurtzel.

During the last summer while on a visit to Mr. George Beltzoover's farm, we were very forcibly struck with the fine appearance of a crop of mangel wurtzel, so much so that we were induced a few days since to inquire of him their product, and were highly gratified to learn that they had yielded 30 tons to the acre, which at 60 lbs. to the bushel is 1000 bushels per acre.—*Far. & Gar.*

Discernment.—The Northampton Courier, in speaking of the Reports of the Committees upon articles exhibited at the late Fair, says:

"The model of an ingenious Power Printing Press, is put down by the Committee, as a Machine for *Grinding Paint!* Is it possible that intelligent Committee could not distinguish between a Printing Press and a *Paint Pot!*